

Scientific IT Services in Open Science

Champak Beeravolu Reddy

IT Directorate

University of Fribourg

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The Scientific IT Team (SIT)

2.5 FTE

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- <https://www.unifr.ch/it/fr/recherche-and-it-scientifique>

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- <https://www.unifr.ch/it/fr/recherche-and-it-scientifique>
- Write to us at scientific-it@unifr.ch

The outline for this "Workshop"

1. REDCap@UniFR (~15 mins presentation, ~5 mins questions)
2. Renku@UniFR (~15 mins presentation, ~5 mins questions)
3. General discussion (~5 mins)

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So what is REDCap?

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- REDCap is a **secure web platform** for **building and managing online databases and surveys**
- REDCap stands for **Research Electronic Data Capture**

Can I download REDCap?

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However...

- REDCap software and consortium support *are available at no charge* to non-profit organizations
- Institutions have to join the "REDCap consortium"
- REDCap EULA only between Vanderbilt University and a non-profit organization

REDCap@UniFR

UniFR is part of the "REDCap consortium"

The screenshot shows the REDCap website interface. At the top, the REDCap logo is on the left, and navigation links for ABOUT, PARTNERS, RESOURCES, and SOFTWARE are on the right. In the center, there are five statistics: Institutions (5579), Countries (143), Projects (1.3M), Users (2M), and Articles (16.7k). Below this, a red text overlay reads "How REDCap is being used in response to COVID-19".

The main content area displays a data visualization interface. At the top, a table shows summary statistics for a variable:

(N)	0.05	0.10	0.25	Median	0.75	0.90	0.95
13	31.4	36.0	38.5	35.00	44.00	47.00	124.20

Below the table, a red text box says "Stats interface inside; export outside". Underneath, it lists "Lowest values: 0, 0, 0, 0, 1" and "Highest values: 39, 44, 47, 47, 240". A box plot is shown below these values, with blue dots representing individual data points and a grey box representing the interquartile range. A right-pointing arrow is visible on the right side of the plot.

At the bottom of the screenshot, a caption reads: "REDCap is a secure web application for building and managing online surveys and databases. While REDCap can be

REDCap@UniFR

UniFR is part of the "REDCap consortium"



REDCap@UniFR

Workshop Demo

The screenshot shows a web browser window with the address bar displaying "https://redcapmed.unifr.ch". The page features the REDCap logo at the top left, followed by the heading "Log In". Below this is the logo for the University of Fribourg (UNI FR) and its name in French and German: "UNIVERSITÉ DE FRIBOURG" and "UNIVERSITÄT FREIBURG". A message instructs users to log in with their username and password, and provides a link to contact the Scientific IT team. The login form consists of two input fields: "Username:" and "Password:". The "Username:" field is currently active, indicated by a blue border. Below the fields is a "Log In" button and a link for "Forgot your password?".

← → ↻ 🏠 🔒 https://redcapmed.unifr.ch ☆ 🛡️ ⬇️ 📄 📅 🌐 ☰

REDCap[®]

Log In

**UNI
FR** ■

**UNIVERSITÉ DE FRIBOURG
UNIVERSITÄT FREIBURG**

Please log in with your user name and password. If you are having trouble logging in, please contact [the Scientific IT team](#).

Username:

Password:

Log In [Forgot your password?](#)

The screenshot shows a web browser window with the URL <https://www.unifr.ch/it/fr/redcap-gestion-des-donnees-personnelles-et-ou-sensibles.html>. The page header includes the UniFR logo (UNIVERSITÉ DE FRIBOURG / UNIVERSITÄT FREIBURG) and navigation links: Liste des prestations, Etat des services, FAQ, A notre sujet, and Contact. The main content area features a sidebar menu with categories like Applications de Gestion, Comptes & Email, Enseignement & Apprentissage, Fichiers & Stockage, Formations, Matériels & Logiciels, and Recherche & IT Scientifique. The main heading is "REDCap : gestion des données personnelles et/ou sensibles". Below this, it specifies the target audience as "Chercheur-euse-s" and states that the DIT provides the platform for managing personal and/or sensitive data in clinical surveys. A prominent orange button says "Demander l'accès →". A "Support employé-e-s" section includes an email address: redcap@unifr.ch. The footer of the page contains the text: "REDCap est une alternative conviviale, économique et sécurisée à Microsoft Excel et Access pour saisir et gérer des données de recherche. Il ne s'agit pas d'un logiciel libre ou gratuit (dans le sens où on l'entend généralement), et il ne peut pas être téléchargé par des particuliers. Tout-e-s les utilisateur-ric-e-s de cette plateforme auront besoin d'une authentification à deux facteurs pour accéder à leurs projets individuels."

REDCap@UniFR

We use a *REDCap* project for REDCap account requests!

The screenshot shows a web browser window with the URL <https://redcapmed.unifr.ch/surveys/?s=X48Y9ND4WM>. The page header includes the UniFR logo (Université de Fribourg) and the REDCap logo (Research Electronic Data Capture). The main heading is "REDCap account request form".

Note: It is very important that the **Principal Investigator (PI)** field be properly specified. When REDCap projects are moved to production (*i.e.* during data collection), the **PI** will be the person who ensures that approval has been obtained for his/her project from the relevant Ethics Commission or equivalent institution.

- **Students cannot assume a PI status** for any project.
- **Personnel from the HFR**, please contact [Antoine Meyer](#) before filling up this form.

If you have any other question regarding this form or REDCap@UniFR, please write to us at redcap@unifr.ch.

Personal details

First Name * must provide value	<input type="text"/>
Last Name * must provide value	<input type="text"/>
Your email * must provide value	<input type="text"/> <small>Note: Please provide an institutional address (@unifr.ch, @h-fr.ch, etc.).</small>

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Data (Science) is everywhere!

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- Management, Economics and Social Sciences

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- Science and Medicine

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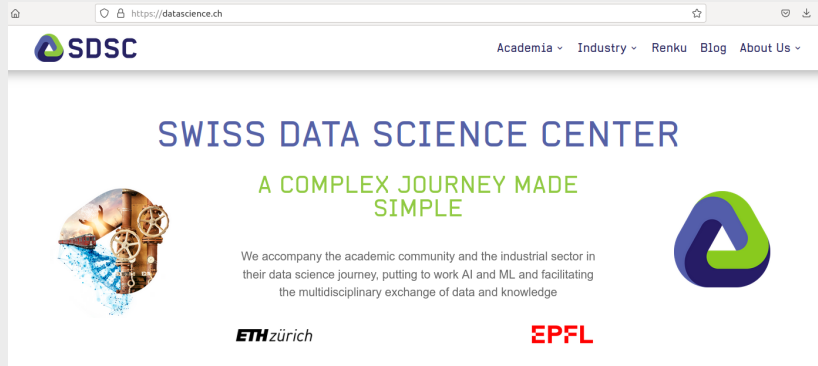
- Management, Economics and Social Sciences
- Science and Medicine
- (Digital) Law

Data (Science) is everywhere!

- Management, Economics and Social Sciences
- Science and Medicine
- (Digital) Law
- (Digital) Humanities

Data (Science) is everywhere!

- Management, Economics and Social Sciences
- Science and Medicine
- (Digital) Law
- (Digital) Humanities
- Even Theology! (*e.g.* analysis of Biblical texts)



The image shows a screenshot of the Swiss Data Science Center (SDSC) website. The browser address bar displays "https://datascience.ch". The website header includes the SDSC logo on the left and navigation links for "Academia", "Industry", "Renku", "Blog", and "About Us" on the right. The main content area features the text "SWISS DATA SCIENCE CENTER" in blue, followed by "A COMPLEX JOURNEY MADE SIMPLE" in green. Below this is a paragraph: "We accompany the academic community and the industrial sector in their data science journey, putting to work AI and ML and facilitating the multidisciplinary exchange of data and knowledge". To the left of the text is an illustration of a water wheel with gears, and to the right is the SDSC logo. At the bottom, the logos for "ETH zürich" and "EPFL" are displayed.

SDSC

Academia ▾ Industry ▾ Renku Blog About Us ▾

SWISS DATA SCIENCE CENTER

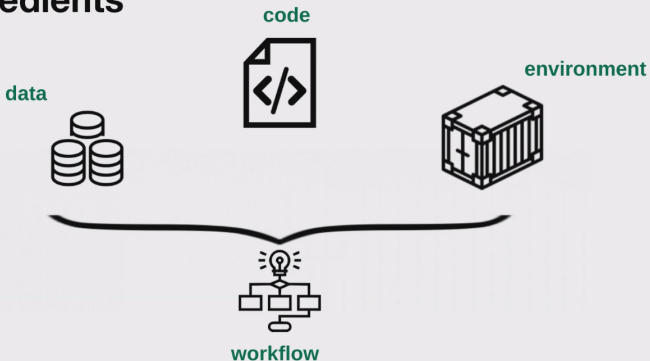
A COMPLEX JOURNEY MADE SIMPLE

We accompany the academic community and the industrial sector in their data science journey, putting to work AI and ML and facilitating the multidisciplinary exchange of data and knowledge

ETH zürich

EPFL

Ingredients

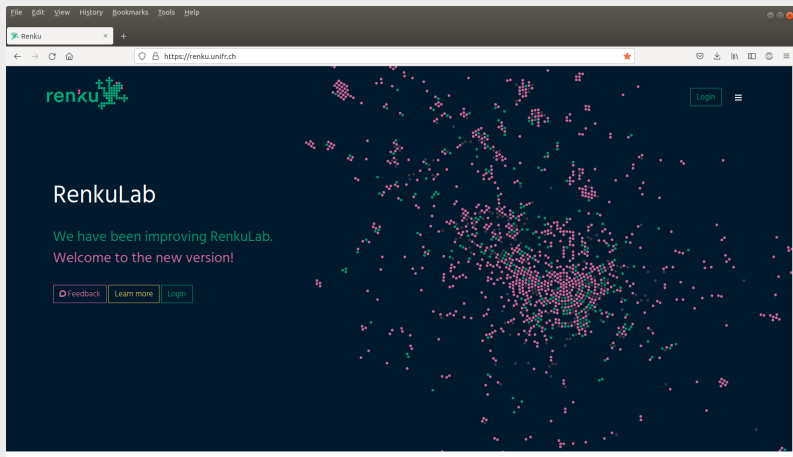


renku

SDSC

Renku@UniFR

"A DEMO is worth a thousand words"

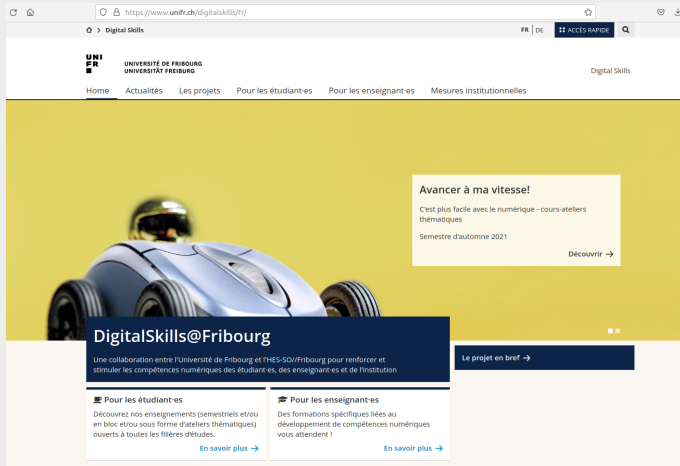


Renku@UniFR

A platform for Open and Reproducible Science/Teaching

Note :

Renku@UniFR is currently offered only for **teaching!**



https://www.unifr.ch/digitalskills/fr/

Digital Skills FR | DE ACCÈS RAPIDE

UNI FR UNIVERSITÉ DE FRIBOURG UNIVERSITÄT FREIBURG Digital Skills

Home Actualités Les projets Pour les étudiant-es Pour les enseignant-es Mesures institutionnelles

Avancer à ma vitesse!
C'est plus facile avec le numérique - cours-ateliers thématiques
Semestre d'automne 2021
Découvrir →

DigitalSkills@Fribourg
Une collaboration entre l'Université de Fribourg et l'HE5-SO/Fribourg pour renforcer et stimuler les compétences numériques des étudiant-es, des enseignant-es et de l'institution

Pour les étudiant-es
Découvrez nos enseignements (semestriels et/ou en bloc et/ou sous forme d'ateliers thématiques) ouverts à toutes les filières d'études.
[En savoir plus →](#)

Pour les enseignant-es
Des formations spécifiques liées au développement de compétences numériques vous attendent !
[En savoir plus →](#)

Le projet en bref →

UNI FR UNIVERSITÉ DE Fribourg
UNIVERSITÄT FREIBURG


Home Actualités Les projets Pour les étudiant-es Pour les enseignant-es Mesures institutionnelles

Digital Skills

Offre pour les enseignant-es > Boosting your digital classroom with Renku

Pour les enseignant-es

- Python Programming online
- Boosting your digital classroom with Renku
 - Module 1
 - Module 2
 - Module 3
- Data Management Plan for Life Science
- Data Management Plan pour les sciences humaines
- Data Analytics without Programming
- Data Analytics in Python
- Offres du Centre de didactique universitaire
- Offres du Centre HES-SO de développement professionnel
- Boot Camp Python Programming



Boosting your digital classroom with Renku

Learn how to create seamless learning experiences using a browser-based online platform **Renku** with focus on interactivity, collaboration and reproducibility. **Renku** provides a safe and easy to use interface to create containerised environments with all the required dependencies and personalised interactive sessions. Teaching happens completely in the browser using the resources provided by Renku@UNIFR. With **Renku** you can :

- focus on teaching and not on configuring student's software environments;
- adjust course granularity to a single question, exercise session or entire semester;
- create classroom ecosystems featuring automation, collaboration and traceability.

The 3 training modules will allow you to learn how to use the online platform **Renku** according to your level of knowledge of Git, Python and command-line scripts.

Note: These pages are only for enrolling in a Renku workshop. You can also [book your own online digital classroom](#).

Module 1

Aucun prérequis en informatique n'est exigé

Module 2

Prérequis : notions de Git et contrôle de version

Module 3

Prérequis : notions de Git, Python, command-line scripts

**UNI
FR** UNIVERSITÉ DE Fribourg
UNIVERSITÄT FREIBURG

Digital Skills

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↳ Mesures institutionnelles · Renku@Unifr

Mesures institutionnelles

Favoriser l'appropriation des outils institutionnels

Soutien à l'intégration des compétences numériques dans les plans d'études

Renku@UniFR : book your online digital classroom



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